CLAIMS

What is claimed is:

1   1.   A hybrid computer/human computation method comprising:

2   a computer system receiving a first and a second subtask of a task;

3   the computer system dispatching the first subtask to a first human for

4   performance by said first human;

5   the computer system receiving a first result from said first human for said first

6   subtask; and

7   the computer system generating a result for said task based at least in part

8   on said first result.

1   2.   The method of claim 1, wherein

2   the method comprises said computer system decomposing a task to be

3   performed into at least a first and a second subtask, in lieu of said computer system

4   receiving a first and a second subtask of a task.

1   3.   The method of claim 1, wherein

2   the method further comprises the computer system dispatching said second

3   subtask to a second human for performance by the second human, and the

4   computer system receiving a second result from the second human for said second

5   subtask; and

6   the computer system further bases its generation of the result for said task on

7   said second result.

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1   4.   The method of claim 3, wherein

2   said task further comprising a third subtask, and the method further

3   comprises the computer system receiving and performing said third subtask

4   producing a third result; and

5   the computer system further bases its generation of the result for said task on

6   said third result.

1   5.   The method of claim 1, wherein

2   the method further comprises the computer system performing said second

3   subtask producing a second result; and

4   the computer system further bases its generation of the result for said task on

5   said second result.

1   6.   The method of claim 1, wherein said human is one of college educated, at

2   most high school educated, at most elementary school educated, and not formally

3   educated.

1   7.   The method of claim 1, wherein said subtask is one of text, speech, sound,

2   and images related operations.

1   8.   The method of claim 1, wherein said result is one of text, numbers, tuples,

2   and sound.

1   9.   The method of claim 1, wherein said task is one of text classification, image

2   comparison, image processing, speech comparison, speech recognition, conversion

3   of speech into text, and comparison of music samples.

1   10.   The method of claim 1, wherein said task is associated with one or more

2   attributes, wherein the attributes include an accuracy attribute, a security attribute, a

3   timeout attribute, a maximum time spent attribute, a maximum cost per task

4   attribute, and a maximum total cost attribute.

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1   11.   The method of claim 1, wherein said task is associated with one or more

2   attributes, and said attributes include an accuracy attribute.

1   12.   The method of claim 11, wherein the method further comprises dispatching

2   said first subtask to $N1 - 1$ additional humans to perform said subtask, and said

3   accuracy comprises a selection of one of majority governs, and at least N2 agreed

4   answers, wherein N2 and N1 are integers, with N2 greater than N1.

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1   13. The method of claim 12, where the method further comprises tracking the

2   accuracy of the humans.

1   14. The method of claim 12, where said generation of the result further takes into

2   consideration the accuracy of the humans.

1   15.   The method of claim 1, wherein said task is associated with one or more

2   attributes including a security attribute, and said security attribute comprises a

3   selection of one of a "strict" security level, a "lax" security level, and "no" security

4   level.

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1   16.   The method of claim 1, wherein said task is associated with one or more

2   attributes, and said attributes include a "maximum time" attribute specifying a

3   maximum amount of time to be spent by an assigned human to perform said first

4   subtask.

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1   17.   The method of claim 1, wherein said task is associated with one or more

2   attributes, and said attributes include a maximum cost per task attribute.

1   18.   The method of claim 1, wherein said task is associated with one or more

2   attributes, and said attributes include a maximum total task cost attribute.

1   19.   A storage medium having stored therein a plurality of programming

2   instructions that are machine executable, wherein when executed, said instructions

3   operate to receive a first and second subtask of a task, dispatch the first subtask to

4   a first human for performance by said first human, receive a first result from said first

5   human for said first subtask, and generate a result for said task based at least in

6   part on said first result.

1   20.   The storage medium of claim 19, wherein said instructions, when executed,

2   operate to decompose a task to be performed into at least a first and second

3   subtask, in lieu of receiving a first and second subtask of a task.

1   21.   The storage medium of claim 19, wherein said instructions, when executed,

2   further operate to dispatch said second subtask to a second human for performance

3   by the second human, receive a second result from the second human for said

4   second subtask, and generate the result for said task further based on said second

5   result.

1   22.   The storage medium of claim 21, wherein said instructions, when executed,

2   further operate to decompose said task into at least said first, said second, and a

3   third subtask; perform said third subtask producing a third result; and generate the

4   result for said task further based on said third result.

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1   23.   The storage medium of claim 19, wherein said instructions, when executed,

2   further operate to perform said second subtask producing a second result, and

3   generating the result for said task further based on said second result.

1   24.   The storage medium of claim 19, wherein said human is one of college

2   educated, at most high school educated, at most elementary school educated, and

3   not formally educated.

1   25.   The storage medium of claim 19, wherein said subtask is one of text and

2   speech.

1   26.   The storage medium of claim 19, wherein said result is one of text, numbers,

2   and tuples.

1   27.   The storage medium of claim 19, wherein said task is one of text

2   classification, image comparison, image processing, speech comparison, speech

3   recognition, conversion of speech into text, and comparison of music samples.

1   28.   The storage medium of claim 19, wherein said task is associated with one or

2   more attributes, wherein the attributes include an accuracy attribute, a security

3   attribute, and a timeout attribute.

1　29.　The storage medium of claim 28, wherein said instructions, when executed,

2　further operate to dispatch said first subtask to N1 - 1 additional humans to perform

3　said first task, and said accuracy includes one of a majority govern, and at least N2

4　agreed results, wherein N2 and N1 are integers, with N1 greater than N2.

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1　30.　The storage medium of claim 28, wherein said security includes one of a

2　strict security level, a lax security level, and no security level.

1　31.　The storage medium of claim 19, wherein said task is associated with one or

2　more attributes, wherein the attributes include a maximum time to be spent on a

3　task, a maximum cost to incur per task, and a maximum total cost for the task.

1　32.　An apparatus comprising:

2　　　a storage medium having stored therein a plurality of programming

3　instructions that are machine executable, wherein when executed, said instructions

4　operate to receive a first and a second subtask of a task, dispatch the first subtask

5　to a first human for performance by said first human, receive a first result from said

6　first human for said first subtask, and generate a result for said task based at least

7　in part on said first result; and

8　　　a processor coupled to said storage medium to execute said instructions.

1　33.　The apparatus of claim 32, wherein said instructions, when executed, further

2　operate to decompose a task to be performed into at least a first and a second

3　subtask, in lieu of said instructions operate to receive a first and a second subtask of

4　a task.

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1 34. The apparatus of claim 32, wherein said instructions, when executed, further

2 operate to dispatch said second subtask to a second human for performance by the

3 second human, receive a second result from the second human for said second

4 subtask, and generate the result for said task further based on said second result.

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1 35. The apparatus of claim 34, wherein said instructions, when executed, further

2 operate to decompose said task into at least said first, said second, and a third

3 subtask; perform said third subtask producing a third result; and generate the result

4 for said task further based on said third result.

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1 36. The apparatus of claim 32, wherein said instructions, when executed, further

2 operate to perform said second subtask producing a second result, and generating

3 the result for said task further based on said second result.

1 37. The apparatus of claim 32, wherein said human is one of college educated,

2 at most high school educated, at most elementary school educated, and not formally

3 educated.

1 38. The apparatus of claim 32, wherein said subtask is one of text and speech.

1 39. The apparatus of claim 32, wherein said result is one of text, numbers, and

2 tuples.

1 40. The apparatus of claim 32, wherein said task is one of text classification,

2 image comparison, image processing, speech comparison, speech recognition,

3 conversion of speech into text, and comparison of music samples.

1 41. The apparatus of claim 32, wherein said task is associated with one or more

2 attributes, wherein the attributes include an accuracy attribute, a security attribute, a

3 timeout attribute, a maximum time for a task attribute, a cost per task attribute, and

4 a maximum task cost attribute.

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1 42. The apparatus of claim 41, wherein said instructions, when executed, further

2 operate to dispatch said first subtask to N1 - 1 additional humans to perform said

3 first subtask, and said accuracy includes one of a majority govern, and at least N2

4 agreed results, wherein N2 and N1 are integer number with N1 greater than N2.

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1 43. The apparatus of claim 42, where said instructions, when executed, further track

2 the accuracy of the humans.

1 44. The apparatus of claim 42, where said instructions, when executed, further take

2 into consideration the accuracy of the humans when generating the result.

1 45. The apparatus of claim 41, wherein said security includes one of a strict

2 security level, a lax security level, and no security.